Course: CHEM - A108-025  
General Chemistry II LAB  
Instructor: Dr. Thorsten Schmidt  
Office: Monroe 101  
Phone: 504-865-3743  
Email: TSCHMIDT@loyno.edu

Term: Spring 2009

Office Hours: by appointment or Friday 02:00 PM - 04:00 PM

COURSE OBJECTIVE
Introduce students to the world of Chemistry through laboratory experiments that relate chemistry principles to the world in which we live. Broaden the knowledge base through thinking in the scientific method. Sharpen the critical thinking skills of students through chemical experimentation.

LABORATORY MATERIALS
The Chemistry Department will provide you with:
- "LabBook". In it you will find the experiments etc. You will get it in printed form and it will be online in Blackboard.

You need to bring:
- Safety Goggles. You must bring them every day and keep them as they are your personal safety equipment.
- "LabNoteBook". This is for preparing experiments and recording experimental data. You continue to use the LabNoteBook from the Gen-Chem-I-Lab since several experiments use information from those old experiments.
- Calculator. You need it since you will have to do many calculations.
- Textbook. You might need some information for the experiments.
- You might want to bring a USB-Memory Stick ("Flashdrive") to save data.
- You must wear Closed Shoes (leather or rubber).
- Wear older clothes that cover the legs.

Please leave big backpacks etc. at home. Cell phones will not be allowed in the laboratories. Bring only what you need!

LABORATORY TIMES

<table>
<thead>
<tr>
<th>Section</th>
<th>Instructor</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM-A108-025</td>
<td>Schmidt</td>
<td>Thursday</td>
<td>02:00 pm - 05:00 pm</td>
</tr>
</tbody>
</table>

Spring Session: 01-12-09 to 05-07-09

The room number of the laboratory will be announced!!!
(Meeting point: in front of MO 120/ 122)
LABORATORY EXPERIMENTS

This semester we will do a series of laboratory experiments that are related to lecture topics. Our laboratory manual draws experiments from a number of different sources. The manual and experiments are revised every semester. See the Laboratory Schedule in your manual for the sequence of experiments and planned dates.

Before lab each week, you MUST read the experiment and do any pre-laboratory questions as well as prepare your laboratory notebook (see below).

During the lab period, the instructor may ask questions of each student about the experiment. Your efficiency, neatness, technique, preparedness and safety practices will be noted. These observations will be taken into consideration when assigning your Notebook and Lab points.

LABORATORY NOTEBOOK

You are required to keep a bound laboratory notebook. The notebooks will be checked regularly in class and may be collected once or twice during the semester for assessment. In general, your notebook should include a table of contents (title and page numbers), and entries on every page in ink.

During the lab period, you MUST record all data and observations in your bound lab notebook; DO NOT use pages from the lab manual or other loose leaf paper. You will then use the contents of your notebook after the lab period is over to fill out any data sheets from the manual. Additionally, you should do all calculations in your lab notebook first and then neatly copy the information onto your data sheets.

Everyone makes occasional mistakes, but you must NEVER tear out pages or use whiteout. To correct an error, simply draw a single line through the error and start again (i.e. this is a mistake). This is the internationally recognized way for scientists to correct mistakes. Words that have been crossed out with a single line will be ignored.

For each experiment, you should include the following in your notebook:

1. Title, Date
2. Objective(s) – The questions that will be answered during your experiment
3. Material List – Include the name, amount and hazards
4. Procedure – A list of steps in your own words
5. Chemical equations and/or structures – This may be given or it will need to be located in the readings or on the web.
6. Data and Observations – The actual amounts of chemicals, colors, physical descriptions
7. Data and Calculations –
8. Possible sources of error – This is an explanation of why your values are different from the theoretical or actual value(s)
9. Brief summary/conclusions – This is where the questions posed in the Objective are answered
You might also wish to roughly duplicate any datasheets in your notebook. This level of preparedness is one of the points your instructor will pay attention to when assigning your Notebook and Lab points.

LABORATORY REPORTS

After completing each experiment you will hand in either the datasheets and post lab questions or a full typed report of the experiment. The Laboratory Schedule notes when to hand in the materials and what is required for each experiment. Your instructor will provide you with more details of what s/he expects for each report but the minimal requirements are listed below.

All laboratory reports are to be prepared individually. You and your partner(s) may work together to collect data and do calculations, but the written report must be in your own words. **Copying your partner's report or answers is a form of cheating.**

Penalties will be imposed by your instructor for reports that are turned in later than one week following the completion of that experiment. You will **lose 10%** of the points for a report that is up to **24 hours** late. Reports that are **2 – 14 days** late will lose 50% of the points and reports handed in after **14 days** will receive **no credit**.

All reports will be graded for grammar and spelling.

LABORATORY QUIZZES

At the beginning of most lab periods, you will have a short (5 – 10 minutes) quiz. Normally, this may consist of one or two questions on the experiment from the previous week as well as the experiment to be performed that day. These quizzes will test you on your understanding of the concepts as well as key terms.

SAFETY

Occupants of the laboratory **MUST WEAR APPROVED SAFETY GOGGLES AND CLOTHING AT ALL TIMES.** Approved clothing is natural fiber: long pants or skirt; crew-neck, short or long sleeve shirt; and close-toed shoes. Open-toed shoes, sleeveless shirts or shirts that expose your midsection or chest, and shorts or short skirts must not be worn in the lab. Students will be asked to leave and may receive a zero for the lab. Long hair must be tied back and all jewelry, especially dangling jewelry, must be removed.

ATTENDANCE

Attendance at all laboratory sessions is mandatory.

An unexcused absence will result in a zero for the missed lab

Scheduled appointments during your normal lab period will be considered an unexcused absence.

If you are unable to attend lab because of an illness or some other problem, you must inform your instructor **as soon as possible**, preferably **before the lab period to be missed**. A
note from your physician will be required to document any illness. Make-up work will be allowed only at the instructor’s discretion.

GRADE
Approximate grading distribution:

<table>
<thead>
<tr>
<th>Component</th>
<th>% of Overall Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Reports</td>
<td>70%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Notebook</td>
<td>15%</td>
</tr>
</tbody>
</table>

Approximate grading scale:

90 – 100 = A  
80 – 89 = B  
70 – 79 = C  
60 – 69 = D  
<60 = F

PREREQUISITES
General Chemistry Lecture (CHEM - A106 and CHEM - A105).
Course Fee: $75.00

PLEASE NOTE:
Eligibility to take MATH A257 is a pre-requisite to take CHEM A105. If you did not receive placement into MATH A257 (or "Math of the program") you cannot be enrolled in CHEM A105. (This does not mean that you must be currently enrolled in MATH A257.)

The Semester may be extended if it is necessary to make up class days due to Emergency University Closings.

All above dates and information are subject to change!